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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,905	10/20/2004	Nektarios Georgalas	36-1862	5057
23117 7590 01/22/2008 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			EXAMINER DEWS, BROOKE J	
			ART UNIT 2182	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/511,905

Applicant(s)

GEORGALAS ET AL.

Examiner

Brooke J. Dews

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 November 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. In view of the applicant's amendment filed 11/05/2007, the status of the application is still pending with respect to claims 1-23. Applicant's arguments have been fully considered but they are not persuasive. Examiner *withdraws* the drawing objections as well as the 35 USC 112 rejections based on amended drawing sheet.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 7, 10, 11, 15, 16, 19, 20-23 are rejected under 35 U.S.C. 102(b) as being taught by Paul Toth (US Publication 2001/0051942), hereafter Toth.

**Regarding claim 1** Toth discloses a method of operating a computer system (**Figure 1**) to provide a user interface (**user interface 124**) to a data storage system (**via computer 102**), said computer system including a rule store (**database 118**) storing one or more rules, said method comprising the steps:

providing a user interface (**interface 124 via user interface module 120**) to said rule store enabling user configuration (**via start, add, select or remove action; Figures 3-6**) of said rule store with one or more rules (**via a value or range of values; Paragraph [0010]**), each rule including information relating to a handler program (**Paragraph [0026]**), said handler program (**via web browser**) being associated with one or more user requirements and being operable to interact with said data storage system in accordance with said user requirements; (**Paragraph [0008]**)

receiving a request (**via query**) detailing one or more user requirements (**via an object, attribute, or corresponding attribute value**); (**Paragraph [0027]**)

responsive to receipt of said request:

a) searching said rule store (**database 118**) (**via database management system 116**) for a rule associating said one or more user requirements of said received request with a handler program (**via set of instructions**);

b) running said handler program (**via operating system 114**) to interact with said data storage system (**102**).

**Claim 2** is rejected for the reasons set forth hereinabove for claim 1, and further Toth discloses a method, wherein said information relating to a handler program (**via web browser**) comprises the name and the location of the handler program.

**Claim 3** is rejected for the reasons set forth hereinabove for claim 1, and further Toth discloses a method, wherein said information relating to a handler program (**web browser**) comprises the handler program itself (**via internet browser software**). (**Paragraph [0040]**)

**Claim 7** is rejected for the reasons set forth hereinabove for claim 1, and further Toth discloses a method wherein said request comprises a request to store (**via computer readable medium 106**) a handler program (**sequences of instructions for effecting the plurality of search actions and other processes**). (**Paragraph [0024]**)

**Claim 10** is rejected for the reasons set forth hereinabove for claim 1, and further Toth discloses a method wherein said rules are expressed in the form of text. (**Paragraph [0027]**)

**Claim 11** is rejected for the reasons set forth hereinabove for claim 10, and further Toth discloses a method wherein said rules are reparable (**refinable**) using a text editor (**via an operator field 150**). (**Paragraph [0028]**)

**Claim 15** is rejected for the reasons set forth hereinabove for claim 1, and further Toth discloses a method wherein said rule store user interface is restricted to a certain class of user (**via user's access level**). (**Paragraph [0041]**)

**Claim 16** is rejected for the reasons set forth hereinabove for claim 1, and further Toth discloses a method wherein the data storage system user interface is available to a different set of users (**non-administrative "depending on users access level"**) from those able to modify said rules in said rule store (**administrator**). (**Paragraph [0041]**)

**Regarding claim 19** Toth discloses a computer system (**Figure 1**) operable to provide a user interface (**user interface 124**) to a data storage system (**via computer 102**), said computer system comprising:

a data storage system (**via computer 102**);

a rule store (**via database 118**);

a user interface (**via user interface module 120**) to said rule store operable to enable a user to configure (**via start, add, select or remove action; Figures 3-6**) said rule store with one or more rules (**via search actions**), wherein each rule includes information relating to a handler program, said handler program being associated with one or more user requirements and being operable to interact with said data storage system in accordance with said **user requirements**; (**Paragraph [0026]**)

request receiving means (**via display 112**) arranged in operation to receive a request detailing one or more user requirements; (**Paragraph [0025]**)

rule store searching means (**database management system 116**)(Directory Service)operable to search said rule store for a rule associating said one or more user requirements of said received request with a handler program;

handler program running means (**via operating system 114**) operable to run said handler program to interact with said data storage system.

**Claim 20** is rejected for the reasons set forth hereinabove for claim 1, and further Toth discloses a digital data (**computer readable medium 106**) carrier carrying a program of instructions executable by processing apparatus. (**Paragraph [0024]**)

**Regarding claim 21** Toth discloses a method of operating a computer system (**Figure 1**) to provide a user interface (**user interface 124**) to a data storage system (**via computer 102**), said computer system including a rule store (**via database 118**) storing one or more rules, each rule associating a handler program (**Paragraph [0026]**) with one or more request characteristics, said method comprising:

providing a user interface (**via user interface module 120**) to said rule store (**via database 118**) enabling the modification of said rules in said rule store;

receiving a request (**via a query**) having one or more request characteristics (**via an object, attribute, or corresponding attribute value**); (**Paragraph [0027]**)

responsive to the receipt of said request:

a) finding a rule (**via database management system 116**) in said rule store (**via database 118**) associating a handler program with the one or more characteristics of said received request;

and b) running (**via operating system 114**) said handler program to interact with said data storage system.

**Claim 22** is rejected for the reasons set forth hereinabove for claim 21, and Toth further discloses a method further comprising storing (**recording**) one or more rules (**search action**) in said rule store. (**Paragraph [0028]**)

**Regarding claim 23** (It appears that applicant would like to invoke 35 U.S.C. 112 6<sup>th</sup> paragraph using “means plus function” limitations, however because means, found in line 6 of claim 23, is not recited as a “means for” performing a specified function, examiner is not restricted to the corresponding structure provided in applicant’s specification.)

Toth discloses a computer system (**Figure 1**) for providing a user interface (**interface 124 via user interface module 120**) to a data storage system (**via computer 102**) said computer system comprising:

a data storage system (**via computer 102**);

storing means (**via database 118**) arranged in operation to store one or more rules, each rule associating a handler program (**Paragraph [0026]**) with one or more request characteristics;

means arranged in operation to provide a user interface (**via user interface module 120**) to said rule store enabling the modification of said rules (**via search actions**) in said rule store;

receiving means (CPU 104/ 112) arranged in operation to receive a request (**query**) having one or more request characteristics (**attributes**): (**Paragraph 0027**)

finding means (**via database management system 116**) arranged in operation to find a rule in said rule store associating a handler program with the one or more characteristics of said received request;

and running means (**via operating system 114**) arranged in operation to run said handler program to interact with said data storage system.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claim 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Paul Toth (US Publication 2001/0051942), hereafter Toth in view of John K. Ahlstrom et al. (US Patent 6327618), hereafter Ahlstrom).

**Claim 4** is rejected for the reasons set forth where Toth discloses claim 1, however Toth does not explicitly disclose a method further comprising the step of running a default handler program to interact with said data storage system if no rule associating a handler program with the one or more user requirements of said received request is found.

Ahlstrom discloses a method further comprising the step of running a default handler program **(via error processing steps)** to interact with said data storage system if no rule associating a handler program with the one or more user requirements **(policy not properly defined)** of said received request is found. **(Column 9 line 66-Column 10 line 5)**

Ahlstrom and Toth are analogous art because they are from the same field of endeavor involving involving query refining.

It would have been obvious to one having ordinary skill in the art to combine Ahlstrom's default handler program with Toth's data storage system. The motivation being to interrogate devices to obtain statistics about the network to which they are attached, and to control such devices by changing routes and configuring network interfaces.

4. Claims 5, 6, 8, 9, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul Toth (US Publication 2001/0051942), hereafter Toth in view of Nektarios Georgalas (A



Framework that uses Repositories for Information Systems and Knowledge Integration),  
hereafter Georgalas.

**Claim 5** is rejected for the reasons set forth where Toth discloses claim 1, however Toth does not explicitly disclose a method, wherein said rule store user interface provision step comprises storing a rule associating predetermined user requirements with a handler program executable to interact with said rule store to introduce a further rule contained within said request into said rule store.

Georgalas discloses storing a rule associating predetermined user requirements with a handler program (**Page 4 lines 13-14 and page 6 line 11-17**) executable to interact with said rule store to introduce a further rule (**new source**) contained within said request into said rule store (**Page 7 lines 1-9**).

Georgalas and Toth are analogous art because they are from the same field of endeavor involving database or file accessing, where the retrieval of data stored in a database or as computer files, where a file is defined as a named collection of data.

It would have been obvious to one having ordinary skill in the art at the time of invention to combine Georgalas' rule storing with Toth's data storage system. The motivation being provide unified access to the contents of the repository and other operational data stores, to provide smoothly integrated information systems. (**Page 2 line 8-10 of Georgalas**)

**Claim 6** is rejected for the reasons set forth hereinabove for claim 5, and further Georgalas discloses a method according to wherein said further rule (**new source**) replaces an existing rule (**via rule-based queries**). (**Page 7 lines 10-23**)

**Claim 8** is rejected for the reasons set forth hereinabove for where Toth discloses claim 7, however Toth does not explicitly disclose a method wherein said further handler program comprises a default handler program

Georgalas discloses a method wherein said further handler program comprises a default handler program (**via generic component**). (**Page 3 paragraph 3**)

Georgalas and Toth are analogous art because they are from the same field of endeavor involving database or file accessing, where the retrieval of data stored in a database or as computer files, where a file is defined as a named collection of data.

It would have been obvious to one having ordinary skill in the art at the time of invention to combine Georgalas' default program with Toth's data storage system. The motivation being provide unified access to the contents of the repository and other operational data stores, to provide smoothly integrated information systems. **(Page 2 line 8-10 of Georgalas)**

**Claim 9** is rejected for the reasons set forth where Toth discloses claim 1, however Toth does not explicitly disclose a method wherein said request contains a rule associating a handler program with the user requirements of said received request **(via queries) (Page 2 lines 15-25)**.

Georgalas discloses a rule associating a handler program with the user requirements of said received request **(via queries). (Page 2 lines 15-25)**

Georgalas and Toth are analogous art because they are from the same field of endeavor involving database or file accessing, where the retrieval of data stored in a database or as computer files, where a file is defined as a named collection of data.

It would have been obvious to one having ordinary skill in the art at the time of invention to combine Georgalas' association rule with Toth's data storage system. The motivation being provide unified access to the contents of the repository and other operational data stores, to provide smoothly integrated information systems. **(Page 2 line 8-10 of Georgalas)**

**Claim 12** is rejected for the reasons set forth where Toth discloses claim 1, however Toth does not explicitly disclose a method wherein said rules are indicative of a time after which said rules should no longer be applied

Georgalas discloses a method wherein said rules are indicative of a time after which said rules should no longer be applied **(the customized components are specialized to perform application specific task, and not be re-used). (Page 4 Paragraph 4)**

Georgalas and Toth are analogous art because they are from the same field of endeavor involving database or file accessing, where the retrieval of data stored in a database or as computer files, where a file is defined as a named collection of data.

It would have been obvious to one having ordinary skill in the art at the time of invention to combine Georgalas' association rule with Toth's data storage system. The motivation being provide unified access to the contents of the repository and other operational data stores, to provide smoothly integrated information systems. **(Page 2 line 8-10 of Georgalas)**

5. Claims 13, 14, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul Toth (US Publication 2001/0051942), hereafter Toth in view of Nektarios Georgalas (US Patent 7019740), hereafter Georgalas1.

**Claim 13** is rejected for the reasons set forth hereinabove where Toth discloses claim 1, however Toth does not explicitly disclose wherein said data storage system comprises a plurality of databases and wherein each one of said plurality of databases has a different data handler.

Georgalas1 discloses a method wherein said data storage system **(202-208 via network 210)** comprises a plurality of databases **(via 300, 308, 316; Figure 3A-C)** and wherein each one of said plurality of databases has a different data handler **(API module 306, 314, 322). (Figure 2)**

Georgalas1 and Toth are analogous art because they are from the same field of endeavor involving query refining, where methods of expanding or limiting access to and retrieve data or files by techniques including fuzzy search, ranking or weighing, relevance, thesaurus, and concept retrieval are used.

It would have been obvious to one having ordinary skill in the art to use the plurality of databases in Georgalas1 in the data storage system of Toth. The motivation would be to allow for an expanded query functionality. **(Column 3 line 65-Column 4 line 5 of Georgalas1)**

**Claim 14** is rejected for the reasons set forth hereinabove for claim 13, and Georgalas1 further discloses a method wherein said databases are of a different format to each other **(heterogeneous databases). (Column 2 line 19-25)**

**Claim 17** is rejected for the reasons set forth hereinabove for claim 1, and further discloses a method wherein said computer system comprises a plurality of computers in communication with one another, the handler programs being run on a different computer to the one that receives said request.

Georgalas1 discloses a method wherein said computer system (**Figure 2**) comprises a plurality of computers (**200-208**) in communication with one another, the handler programs (**API module 306, 314, 322**) being run on a different computer to the one that receives said request. (**Figure 3A-C**)

Georgalas1 and Toth are analogous art because they are from the same field of endeavor involving query refining, where methods of expanding or limiting access to and retrieve data or files by techniques including fuzzy search, ranking or weighing, relevance, thesaurus, and concept retrieval are used.

It would have been obvious to one having ordinary skill in the art to use the plurality of computers in Georgalas1 in the data storage system of Toth. The motivation being to allow for an expanded query functionality. (**Column 3 line 65-Column 4 line 5 of Georgalas1**)

**Claim 18** is rejected for the reasons set forth hereinabove for claim 1, and further discloses a method wherein said computer system comprises a plurality of computers in communication with one another, the rule store being on a different computer to the one that receives said request.

Georgalas1 discloses a method wherein said computer system (**Figure 2**) comprises a plurality of computers (**200-208**) in communication with one another (**via network 210**), the rule store (**304, 312, 320, 326**) being on a different computer (**202-208**) to the one that receives said request (**query**).

Georgalas1 and Toth are analogous art because they are from the same field of endeavor involving query refining, where methods of expanding or limiting access to and retrieve data or files by techniques including fuzzy search, ranking or weighing, relevance, thesaurus, and concept retrieval are used.

It would have been obvious to one having ordinary skill in the art to use the plurality of computers in Georgalas1 in the data storage system of Toth. The motivation being to allow for an expanded query functionality. (**Column 3 line 65-Column 4 line 5 of Georgalas1**)

***Response to Arguments***

Applicant's arguments are summarized as the following:

**A.** There is simply no disclosure in Toth of a rule store let alone searching a rule store for a rule associating one or more user requirements of a received request with a handler program, as required by each of the present claims.

In response to applicant's argument, **A**, examiner notes that Toth discloses searching a database for a record associating one or more attributes of a query with a set of instructions (wherein rule store=database, rule=record, user requirements= attributes, request=query, and handler program=a set of instructions). (**Paragraph [0024 and 0025] of Toth**)

**B.** Toth does not have a rule store storing rules where each rule includes information relating to a handler program.

In response to applicant's argument, **B**, examiner notes that Toth discloses a database storing records where each record includes information relating to a set of instructions. (**Paragraph [0024] and Claim 22 of Toth**)

**C.** Regarding Georgalas "A framework that uses repositories for information systems and knowledge integration," Applicants have not been able to find the wording the Examiner refers to in this document in relation to claims 5, 6, 8, 9 and 12. It is therefore difficult to understand the Examiner's rejection.

In response to applicant's argument, **C**, it appears to the examiner that the applicant is not referring to the non-patent literature document the examiner included with the last office action, therefore it is being sent again, to help applicant "find the wording".

**D.** The motivation the Examiner states for combining Toth and Ahlstrom; i.e., to interrogate devices to obtain statistics about the network to which they are attached does not make any sense since the system in Toth does not involve a network.

In response to applicant's argument, **D**, examiner notes that the database in Toth is analogous to the data base (i.e. information base 60) of Ahlstrom that interacts with the network. Both involve data management. (**Column 2 lines 12-17 of Ahlstrom**)

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brooke J. Dews whose telephone number is 571-270-1013. The examiner can normally be reached on M-F 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alford Kindred can be reached on (571) 272-4037. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:  
10/511,905  
Art Unit: 2182

Page 14

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B&D  
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*William D. ...*  
Primer Examiner  
1/16/2008